

## WHAT IS CLAIMED:

1. A method for developing an Enterprise JavaBean (EJB) component, comprising the steps of:

(a) analyzing a business domain to determine functional requirements of said

5 business domain;

(b) transforming said functional requirements into an EJB component model; and

(c) building an EJB component in accordance with said EJB component model

that encompass the business functionality of said business domain.

2. The method of claim 1, further comprising the steps of:

10 modifying said functional requirements by a user; and

repeating the steps (b) and (c) to provide a parallel development process.

3. The method of claim 1, wherein said EJB components are extensible and configurable.

4. The method of claim 1, wherein said functional requirements include data and process model of said business domain.

15 5. The method of claim 4, wherein said EJB component model encapsulates the data and process model of the said business domain.

6. The method of claim 1, wherein the step of analyzing includes the step of generating a list of inputs, each input identifying a resource that relate to said business domain.

20 7. The method of claim 6, further comprising the step of generating eFunction matrix from said list of inputs.

8. The method of claim 1, wherein the step of transforming transforms said functional requirements using an unified modeling language (UML) tool to generate said EJB component model.

25 9. The method of claim 8, wherein said EJB component model includes a plurality of EJB classes.

10. The method of claim 9, wherein the step of building builds said EJB component from at least one of the following class stereotypes: Belonging, Session, Entity, Configurable Entity, Business Policy and Workflow.

30 11. The method of claim 1, wherein the step of transforming includes the step of mapping eXtensible Markup Language (XML) to said EJB component model.

12. The method of claim 1, wherein the step of analyzing includes the step of dividing said business domain into one or more sub-domains and determining functional requirements for each of said sub-domains; and wherein the step of transforming transforms each of said functional requirements for said sub-domains into said EJB component model.

5 13. The method of claim 1, wherein the step of building includes the step of generating relational mappings and deployment descriptors.

14. The method of claim 1, wherein the step of building includes the steps of:  
generating end-user documentation;  
developing unit tests to test said EJB component; and  
10 generating a reference implementation of said EJB component.

15. The method of claim 14, further comprising the step of verifying said end-user documentation to said EJB component.

16. The method of claim 14, further comprising the step of packaging said EJB component for deployment with container managed persistence.

15 17. The method of claim 1, wherein said EJB component is a Smart component having at least one of following Smart feature: SmartKey, SmartHandle and SmartValue.

18. The method of claim 16, wherein said Smart component is an eBusiness Smart component.